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United States Patent [19]**Baxter et al.**[11] **Patent Number:** **5,623,878**[45] **Date of Patent:** ***Apr. 29, 1997**[54] **DYNAMIC RIDE VEHICLE**

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[*] **Notice:** The term of this patent shall not extend beyond the expiration date of Pat. No. 5,403,238.

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Related U.S. Application Data

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[51] **Int. Cl.⁶** **A63G 25/00**

[52] **U.S. Cl.** **104/85; 104/53; 104/154; 472/43; 472/59; 472/64; 180/165**

[58] **Field of Search** **104/53, 83, 85, 104/154, 289, 296; 434/37, 55, 58; 472/43, 57, 59, 64, 135; 180/165**

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[57] **ABSTRACT**

A dynamic ride vehicle for executing a sequence of distinct motion patterns and for providing unique ride experiences in an amusement park attraction or other environment includes a movable chassis and a body having a passenger seating area. A motion apparatus, including computer controlled actuators, imparts motion to the body along a plurality of axes independent of any motion of the chassis as it moves along a path. As the vehicle travels along the path, articulation of the body and appropriate steering of the vehicle enables the vehicle to execute, in cooperation with the motion apparatus, a sequence of distinct motion patterns. Execution of the motion patterns enhances the passengers' sensation of vehicle movement that is actually taking place, as well as the sensation of a realistic moving ride vehicle experience that is actually not happening.

78 Claims, 32 Drawing Sheets